Lokraj Srinivasan

SDE Intern at Amazon

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EDUCATION

Georgia Institute of Technology, College of Computing — **Atlanta, GA**
Master of Science — *Expected May 2023*
Major: Computer Science – Specialization in Machine Learning — **GPA**: N/A

University of Michigan – Ann Arbor, College of Engineering — **Ann Arbor, MI**
Bachelor of Science Engineering — *May 2021*
Major: Computer Science — **GPA**: 3.956

WORK EXPERIENCE

University of Michigan – Michigan Institute for Data Science — **Ann Arbor, MI**
Research Assistant — *January 2021 – May 2021*
- Created a department name ambiguity detection system for papers submitted to the American Mathematical Society
- Utilized Jaccard similarity metrics coupled with Damerau minimum edit distance calculations to detect duplicates
- Implemented a Python script that runs new paper submissions through the AMS department database to find duplicates

Independent Study – Collabrify Project — **Ann Arbor, MI**
Software Engineering Intern — *January 2021 – May 2021*
- Worked on Collabrify App Suite for the Intergalactic Learning Mobile Center with Professor Elliot Soloway
- Assisted on creating an interactive whiteboard application in React and CoffeeScript for K-5 classes and schools
- Conducted minimum viable product testing with teachers as part of design cycle process

Capital One — **Richmond, VA**
Software Engineering Intern — *June 2020 – August 2020*
- Involved in building an application to pipeline, process, and manage cash transaction reports for AML investigators
- Enhanced components and backend REST API to support multiple and varying levels of investigator roles
- Utilized AngularJS, React, Java Spring Boot, and MySQL workbench as part of tech stack

University of Michigan – School of Information — **Ann Arbor, MI**
Undergraduate Research Assistant – UROP — *September 2019 – May 2020*
- Analyzed student response data to examine the effects of Adaptive Parsons problems - advised by Dr. Barbara Ericson
- Utilized both NVivo and Python scripts to implement filtering and sorting of the data entries provided
- Attempted to implement a response classifier to categorize the given anonymized student csv data automatically

Sandia National Laboratories — **Livermore, CA**
Software Engineering Year-Round Intern — *May 2019 – May 2020*
- Involved in project using game theory to understand decision-making during wartime using board game simulation data
- Performed analysis on dyad level responses between players of the simulation to classify and find causes of retaliation
- Researched and developed a spell-checking system that uses Metaphone and Damerau-Levenshtein editing distance

Projects

ChessTime
- Implemented a computer vision project designed to identify chess board configuration and output FEN string format
- Pre-processed data by taking board images (Kaggle) and splicing them to create individual piece training/testing data
- Utilized a Convolutional Neural Network to classify each tile into 13 classes (each black or white piece and empty)
- Used model output to construct FEN string for current board to be used to determine what the next best optimal move is

TutorBot
- Built a Bot for students to find tutoring or assistance through a quick conversation on Facebook Messenger or Slack.
- Created the bot using Dialogflow, Google Maps API for location-based services as well as Firebase for backend support
- Created a validation system to incorporate tutor ratings, user ratings, proximity, courses, and university.
- Currently expanding the project to include not just tutors but rather a variety of consultants for other services

KEY COMPETENCIES AND SKILLS

- Python, C++, Java, Node, AngularJS, SQL, Ruby, Linux, Windows, Firebase, NVivo, React, React-Redux,
- MATLAB, R, TensorFlow, PyTorch, Numpy, Pandas